

L6 ANSWER 15 OF 29 CAPLUS COPYRIGHT 2002 ACS

AN 1992:179837 CAPLUS

DN 116:179837

TI Multifunctional high-iron cement clinker and its manufacture

IN Zhong, Xingbiao; Huang, Po; Xie, Dong

PA Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 12 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

IC ICM C04B007-02

CC 58-1 (Cement, Concrete, and Related Building Materials)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1052838 ✓	A	19910710	CN 1990-106901	19900805
	CN 1027971	B	19950322		

AB The cement clinker is prepd. by mixing compounded mineralizing agent, e.g., SO₃ + CaF₂, in the mixt. of limestone (CaO content <50%), clay (contg. 4-10% sand), low-grade coal (heat content 4000 Kcal/kg), and Fe powder to give a resulting mixt. having alumina modulus .ltoreq.0.90 and lime satn. factor 0.980 .+- . 0.03. The obtained clinker comprises C3S 55.0-70.0, C2S 0-5.0, C3A 2.0-6.0, C4AF 18.0-24.0, and C4A3.hivin.S + C11A7.CaF₂ 2.0-8.0%.

ST sulfur trioxide **mineralizer** cement clinker; calcium fluoride **mineralizer** cement clinker

IT Cement

(clinkers, high-iron, manuf. of, **mineralizers** in)

IT 10034-77-2 12005-25-3 12042-78-3 12068-35-8 12168-85-3, Calcium oxide silicate (Ca₃O(SiO₄)) 12254-31-8

RL: USES (Uses)

(cement clinker contg., manuf. of high-iron, **mineralizers** in)

IT 7446-11-9, Sulfur trioxide, uses 7789-75-5, Calcium fluoride, uses

RL: USES (Uses)

(**mineralizer**, in high-iron cement clinker manuf.)

L6 ANSWER 25 OF 29 CAPLUS COPYRIGHT 2002 ACS
 AN 1966:2577 CAPLUS
 DN 64:2577
 OREF 64:405a-b
 TI Metallurgical exothermic mixtures
 IN Mendelsohn, Natie
 SO 6 pp.
 DT Patent
 LA Unavailable
 IC C21C
 CC 20 (Nonferrous Metals and Alloys)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 1394847		19650409	FR	19640222
AB	<p>The title mixts. contg. Al (powder or granules) (I) 5-45, Fe₂O₃ (II) and (or) Fe₃O₄ (III) 10-80, MnO₂ (IV) or pyrolusite (V) 0-25, Al slag (Al₂O₃) (VI) 20-50, alk. or alk.-earth fluorides 0-20, oxidants (nitrates, nitrites, or chlorates) 5-25, siliceous sand (VII), refractory clay, etc., 5-25, isolators (kieselguhr, perlite (VIII), vermiculite) 0-20, mineralizers 0.5-5, and charcoal (IX), or mineral coal 5-45 wt. % are used to reduce the vol. and prevent the solidification of the deadheads of metal castings. Thus, in the case of Cu alloy castings, a dead-head of 220 kg. was obtained for an ingot of 120 kg. by using an exothermic mixt. contg. I 18, II 12, III 9, IV or V 8, VI 14, NaF 5, NaCl₂, NaNO₃ 8, VII 7, dolomite 6, VIII 2, IX 10, and ilmenite 2 wt. %. A deadhead of 280 kg. was obtained by using com. exothermic products.</p>				
IT	Casting process (for copper alloys and steel, exothermic mixt. for hot tops in)				
IT	Alkali metal chlorates Charcoal (in exothermic hot tops)				
IT	Coke (in exothermic mists. for casting hot tops)				
IT	Alkali metal chlorides Alkali metal fluorides Alkali metal nitrates Alkali metal nitrites Alkaline earth chlorides Alkaline earth fluorides Coal Dunites Feldspars Kieselguhr Olivine Phosphates Pyroxenes Sand Sawdust Silicates Slags (in exothermic mixts. for casting hot tops)				
IT	Copper alloys (casting of, exothermic mixt. for hot top in)				
IT	Dolabrin, .beta.-Dolabrin (in exothermic mixt. for casting hot tops)				
IT	Fe ₃ O ₄ (in exothermic mixt. for mold hot top)				
IT	Calcium phosphate Calcium silicate Lime				

Magnesium titanate(IV)
Manganese oxide, Mn5O9
Perlite (the rock)
Serpentine (the mineral)
Zirconium silicate

(in exothermic mixts. for casting hot tops)

IT Fe3O4, Fe2O3

(in exothermic mixts., for casting hot tops)

IT 7631-99-4, Sodium nitrate 7647-14-5, Sodium chloride 7681-49-4, Sodium fluoride

(in exothermic mixt. for casting hot tops)

IT 12168-52-4, Ilmenite

(in exothermic mixt. for mold hot top)

IT 471-34-1, Calcium carbonate 1302-76-7, Kyanite 1309-48-4, Magnesium oxide 1314-13-2, Zinc oxide 1314-23-4, Zirconium oxide, ZrO2

1317-70-0, Anatase 1317-80-2, Rutile 1318-00-9, Vermiculite

3486-35-9, Zinc carbonate 7429-90-5, Aluminum 7631-86-9, Silica

7778-18-9, Calcium sulfate 7784-18-1, Aluminum fluoride 7789-75-5,

Calcium fluoride 12135-61-4, Sphene 12188-41-9, Brookite 13463-67-7,

Titanium oxide, TiO2 13717-00-5, Magnesite 14681-78-8, Enstatite

14807-96-6, Talc 14808-60-7, Quartz 14854-26-3, Pyrolusite

15096-52-3, Cryolite

(in exothermic mixts. for casting hot tops)